

Amendments to the Claims

Please amend the Claims as follows (the changes in these Claims are shown with ~~striketrough~~ for deleted matter and underlining for added matter). A complete listing of the claims are listed below with proper claim identifiers.

1. (Canceled)
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13. (Canceled)

14. (Currently Amended) A production method of a medium conveying belt having an electrically conductive electrode pattern on an outer circumferential surface of a multi-layered endless belt and further having an electrode protective layer on an outer circumferential surface of the electrode pattern, the production method comprising:

a step of preparing a laminated source material film composed of a plurality of layers including a layer of nonthermoplastic polyimide film,

a step of preparing a film with an electrode pattern by forming an electrode pattern for one circumferential length of a tubular object at one end on one surface of a monolayer film of the laminate film or thermoplastic resin;

a winding step of winding the film with the electrode pattern at least two times around an axial core so that the electrode pattern forms the outermost circumferential surface, and further winding a resin film for forming the electrode protective layer at least two times on a surface of the electrode pattern; and

a heat-welding step of heat-welding the film with the electrode pattern and the resin film for the electrode protective layer which are wound around the axial core.

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70. (New) The production method of a medium conveying belt according to claim 14, wherein said source material film is a laminate film formed by disposing an adhesive layer formed from at least one selected from the group consisting of epoxy resin, silicone resin, vinyl ester resin, phenolic resin, unsaturated polyester resin, bismaleimide resin, urethane resin, melamine resin, and urea resin, on an entire surface

or a specific portion of one surface or both surfaces of a nonthermoplastic polyimide film.

71. (New) The production method of a medium conveying belt according to claim 14, wherein said source material film is a laminate film formed by disposing a thermoplastic resin layer made of a thermoplastic polyimide resin or at least one resin selected from the group consisting of polyether sulfone, polyethylene terephthalate, polyethylene naphthalate, polyether ether ketone, polyphenylene sulfide, polyetherimide, polysulfone, polyamideimide, polyetheramide, and polyarylate, on an entire surface or a specific portion of one surface of a nonthermoplastic polyimide film.

72. (New) The production method of a medium conveying belt according to claim 14, wherein said source material film is formed by laminating a monolayer film made of a thermoplastic polyimide resin or at least one resin selected from the group consisting of polyether sulfone, polyethylene terephthalate, polyethylene naphthalate, polyether ether ketone, polyphenylene sulfide, polyetherimide, polysulfone, polyamideimide, polyetheramide, and polyarylate.

73. (New) The production method of a medium conveying belt according to claim 72, further comprising a delivering step of delivering the thermoplastic resin film and the thermoplastic polyimide film.

74. (New) The production method of a medium conveying belt according to claim 14, wherein said electrode pattern forming step comprises a substep of forming an electrode pattern for one circumferential length of a tubular object at the other end on the one surface of said one layer and said winding step is winding the film with the electrode pattern at least two times around an axial core so that one electrode pattern forms the outermost circumferential surface and the other electrode pattern forms the innermost circumferential surface and further winding a resin film for forming the electrode protective layer at least two times on a surface of the electrode pattern.

75. (New) The production method of a medium conveying belt according to claim 70, wherein said electrode pattern forming step comprises a substep of forming

an electrode pattern for one circumferential length of a tubular object at the other end on the one surface of said one layer and said winding step is winding the film with the electrode pattern at least two times around an axial core so that one electrode pattern forms the outermost circumferential surface and the other electrode pattern forms the innermost circumferential surface and further winding a resin film for forming the electrode protective layer at least two times on a surface of the electrode pattern.

76. (New) The production method of a medium conveying belt according to claim 71, wherein said electrode pattern forming step comprises a substep of forming an electrode pattern for one circumferential length of a tubular object at the other end on the one surface of said one layer and said winding step is winding the film with the electrode pattern at least two times around an axial core so that one electrode pattern forms the outermost circumferential surface and the other electrode pattern forms the innermost circumferential surface and further winding a resin film for forming the electrode protective layer at least two times on a surface of the electrode pattern.

77. (New) The production method of a medium conveying belt according to claim 72, wherein said electrode pattern forming step comprises a substep of forming an electrode pattern for one circumferential length of a tubular object at the other end on the one surface of said one layer and said winding step is winding the film with the electrode pattern at least two times around an axial core so that one electrode pattern forms the outermost circumferential surface and the other electrode pattern forms the innermost circumferential surface and further winding a resin film for forming the electrode protective layer at least two times on a surface of the electrode pattern.

78. (New) The production method of a medium conveying belt according to claim 73, wherein said electrode pattern forming step comprises a substep of forming an electrode pattern for one circumferential length of a tubular object each at one end on one surface and at the other end on the opposite surface of said one layer and said winding step is winding the film with the electrode pattern at least two times around an axial core so that one electrode pattern forms the outermost circumferential surface and the other electrode pattern forms the innermost circumferential surface and further

winding a resin film for forming the electrode protective layer at least two times on a surface of the electrode pattern.

79. (New) The production method of a medium conveying belt according to any one of claims 14 and 70-78, wherein a hole is formed in said one layer so that the electrode pattern is exposed to the inside of the medium conveying belt after winding and heating, or the width of said one layer is narrowed in a direction perpendicular to the circumferential direction, and an electric power can be supplied from the inside of the belt in applying a voltage to the electrode pattern between the two layers.

80. (New) The production method of a medium conveying belt according to any one of claims 14 and 70-78, further comprising a post-processing step of bending an end of the film with the electrode pattern together with the electrode pattern to the inside of the medium conveying belt for contact-bonding by heating,

wherein the width of said electrode protective layer is narrowed in a direction perpendicular to the circumferential direction so that said electrode protective layer becomes narrower than that of said one layer.

81. (New) The production method of a medium conveying belt according to any one of claims 14 and 70-78, wherein an electrical conduction is established between the electrode pattern and the inside surface of the medium conveying belt by drilling a hole through the medium conveying belt and forming a through-hole with an electrically conductive paste, or by processing with an electrically conductive fiber using a sewing machine, or by using an eyelet, a stapler, or another method, whereby an electric power can be supplied from the inside of the belt in applying a voltage to the electrode pattern between the two layers.

82. (New) The production method of a medium conveying belt according to any one of claims 14 and 70-78, wherein the axial core used in said winding step comprises a main body and an attachable and detachable thin metal layer fitted onto the main body.

83. (New) The production method of a medium conveying belt according to claim 82, wherein said attachable and detachable thin metal layer has an adhesion preventive layer disposed on a surface thereof.

84. (New) The production method of a medium conveying belt according to any one of claims 14 and 70-78, wherein said heating step comprises:

a step of attaching a tubular cover bag on an outermost circumferential surface of the wound electrode protective layer to cover the whole of the film with the electrode pattern and the electrode protective layer with the cover bag; and

a step of heat-welding the film with the electrode pattern and the electrode protective layer in a state in which an outside of the cover bag receives a pressure higher than a pressure applied to an inside of the cover bag.

85. (New) The production method of a medium conveying belt according to claim 84, wherein a surface roughness Ra of the inside of said tubular cover bag is at most 0.5 μm .

86. (New) The production method of a medium conveying belt according to claim 84, wherein a surface roughness Rz of the inside of said tubular cover bag is at most 2.0 μm .

87. (New) The production method of a medium conveying belt according to claim 84, wherein the cover bag has a rubber elasticity.

88. (New) The production method of a medium conveying belt according to claim 85, wherein the cover bag has a rubber elasticity.

89. (New) The production method of a medium conveying belt according to claim 87, wherein the cover bag has a rubber elasticity.

90. (New) The production method of a medium conveying belt according to any one of claims 14 and 70-78, wherein a filler having the maximum particle size of at most 5 μm is introduced into the material film or the thermoplastic resin film constituting said medium conveying belt.

91. (New) The production method of a medium conveying belt according to claim 80, wherein a filler having the maximum particle size of at most $5\ \mu\text{m}$ is introduced into the material film or the thermoplastic resin film constituting said medium conveying belt.

92. (New) The production method of a medium conveying belt according to claim 79, wherein a filler having the maximum particle size of at most $5\ \mu\text{m}$ is introduced into the material film or the thermoplastic resin film constituting said medium conveying belt.

93. (New) The production method of a medium conveying belt according to any one of claims 14 or 70-78, wherein an electric power supplying part is disposed only on one side.

94. (New) The production method of a medium conveying belt according to claim 79, wherein an electric power supplying part is disposed only on one side.

95. (New) The production method of a medium conveying belt according to claim 80, wherein an electric power supplying part is disposed only on one side.

96. (New) The production method of a medium conveying belt according to claim 84, wherein said step of heat-welding the film with the electrode pattern and the electrode protective layer is a step of heat-welding the film with the electrode pattern and the electrode protective layer in a state in which an outside of the cover bag receives a gas pressure higher than a gas pressure applied to an inside of the cover bag.

97. (New) The production method of a medium conveying belt according to claim 84, wherein said step of heat-welding the film with the electrode pattern and the electrode protective layer is a step of heat-welding the film with the electrode pattern and the electrode protective layer after bringing the inside of the cover bag into a reduced pressure state.

98. (New) The production method of a medium conveying belt according to claim 96, wherein said step of heat-welding the film with the electrode pattern and the electrode protective layer is a step of heat-welding the film with the electrode pattern and the electrode protective layer after bringing the inside of the cover bag into a reduced pressure state.